

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code Cost-Plus-Fixed-Fee		Page 1 Of 7	
2. Amendment/Modification No. P00005		3. Effective Date 2004MAY13		4. Requisition/Purchase Req No. SEE SCHEDULE		5. Project No. (If applicable)	
6. Issued By TACOM WARREN BLDG 231 AMSTA-AQ-ABGD PHILLIP LAWRENCE (586)574-5273 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: LAWRENCPT@TACOM.ARMY.MIL		Code W56HZV		7. Administered By (If other than Item 6) DCMA SANTA ANA 34 CIVIC CENTER PLAZA ROOM 813A SANTA ANA CA 92701-4056 SCD C PAS NONE ADP PT HQ0339		Code S0513A	
8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) ROD MILLEN SPECIAL VEHICLES INC 7575 REYNOLDS CIRCLE HUNTINGTON BEACH, CA. 92647-6787 TYPE BUSINESS: Other Small Business Performing in U.S.				<input type="checkbox"/>		9A. Amendment Of Solicitation No.	
				<input type="checkbox"/>		9B. Dated (See Item 11)	
				<input checked="" type="checkbox"/>		10A. Modification Of Contract/Order No. DAAE07-01-C-L018	
Code 02YB9 Facility Code				<input type="checkbox"/>		10B. Dated (See Item 13) 2001FEB03	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. Accounting And Appropriation Data (If required) ACRN: AE NET INCREASE: \$49,845.00							
13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS It Modifies The Contract/Order No. As Described In Item 14.							
KIND MOD CODE: G							
<input type="checkbox"/> A. This Change Order is Issued Pursuant To: The Changes Set Forth In Item 14 Are Made In The Contract/Order No. In Item 10A.							
<input type="checkbox"/> B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).							
<input checked="" type="checkbox"/> C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of: Changes Clause I.61 of the contract							
<input type="checkbox"/> D. Other (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office.							
14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE SECOND PAGE FOR DESCRIPTION							
Contract Expiration Date: 2004APR30							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. Name And Title Of Signer (Type or print)				16A. Name And Title Of Contracting Officer (Type or print) MICHAEL CIONI CIONIM@TACOM.ARMY.MIL (586)574-7070			
15B. Contractor/Offeror (Signature of person authorized to sign)		15C. Date Signed		16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		16C. Date Signed 2004MAY13	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE				30-105-02 STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243			

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-01-C-L018 MOD/AMD P00005	Page 2 of 7
Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC		

SECTION A - SUPPLEMENTAL INFORMATION

PROGRAM:	SBIR Phase II : Semiactive Shock Absorber for HMMWV
PURPOSE OF MODIFICATION:	Testing of Semiactive Shock Absorber at Yuma Proving Grounds
PRIOR CONTRACT AMOUNT:	\$1,254,867.00
CONTRACT AMOUNT REVISED THIS ACTION:	\$ 49,845.00
CURRENT CONTRACT AMOUNT:	\$1,304,712.00

The purpose of this modification is to provide funding in the amount of \$49,845.00 for round trip shipping of one Stryker vehicle to Yuma Proving Grounds for testing of the semiactive shock absorber and to provide for contractor engineering support at Yuma during the testing.

This is a Bi-lateral modification.

The contract is modified as follows:

1. Section B is updated to reflect the incorporation of \$49,845.00 under CLIN 0001AG and to update the Estimated Cost, Fixed Fee and Total Cost in CLIN 0001 .
2. Section C is updated to reflect the change of shipping instructions in C.14.2.
3. Section G is updated to reflect the incorporation of the applicable accounting data.
4. Section H is updated to reflect the change of shipping instructions in paragraph H.16.3.
5. As a result of this action the total contract amount is increased by \$49,845 from \$1,254,867 to \$1,304,712. The Estimated Cost (including Cost of Money) is increased by \$45,949 from \$1,146,552 to \$1,192,501 with the fixed fee increasing by \$3,896, from \$108,315 to \$112,211 All other terms and conditions of this contract, as previously modified, remain unchanged and in full force and effect.

*** END OF NARRATIVE A 004 ***

Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT					
0001	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS <u>DELIVERABLE SERVICE</u> SECURITY CLASS: Unclassified ESTIMATED COST: \$1,192,501 FIXED FEE: \$ 112,211 TOTAL COST: \$1,304,712 (End of narrative B001)									
0001AG	<u>SERVICES LINE ITEM</u> NOUN: FY04 PH III SBIR ROD MILLEN PRON: E142C109EH PRON AMD: 02 ACRN: AE AMS CD: 63300544111 <u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination <u>Deliveries or Performance</u> DLVR SCH PERF COMPL <table><tr><td><u>REL CD</u></td><td><u>QUANTITY</u></td><td><u>DATE</u></td></tr><tr><td>001</td><td>0</td><td>30-SEP-2004</td></tr></table> \$ 112,695.00	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	0	30-SEP-2004			\$ <u>112,695.00</u>
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>								
001	0	30-SEP-2004								

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-01-C-L018 MOD/AMD P00005	Page 4 of 7
Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC		

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.8 Phase II Plus Technical Objectives:

C.8.1 The primary objective of the Phase II Plus work is to implement an MR damper semi-active suspension system on an eight wheeled 20-ton vehicle and show the performance advantages of this suspension technology on large military vehicles. This suspension design would be derived from the system developed for the HMMWV in phases 1 and II of this program.

C.8.1.2 The tasks for this complete project are broken down into these major divisions:

- a. Definition of System Requirements.
- b. Development of an appropriately-sized MR Fluid Damper for the 20 ton 8x8 application based on the Phase II MR damper for the HMMWV. System performance may have to be compromised due to the specific packaging requirements of the vehicle.
- c. Mechanical integration of suspension components.
- d. Integration of controller and sensor package into the vehicle.
- e. Shakedown testing and tuning.

C.8.1.3 One vehicle shall be provided to the contractor by the Government (see clause H.16 hereof) for use under this program.

C.9 Definition of System Requirements

C.9.1 The contractor shall execute an analysis of the current 20 ton 8x8 vehicle suspension configuration's performance and impact on (global) vehicle dynamics. The contractor shall also determine standards for suspension and vehicle performance improvement.

C.10 Development of an MR Fluid Damper for the 20 ton 8x8

C.10.1 Considering all wheel positions, the contractor shall:

- a. Determine force and velocity requirements for the vehicle dampers.
- b. Perform a packaging study to determine required trade-offs between damper size, performance, and fit within the vehicle.
- c. Determine if a damper reservoir is necessary and/or practical to incorporate into the design.

C.11 Mechanical Integration of System

C.11.1 The contractor shall design required mounts, suspension components and vehicle modifications to mount MR dampers and to meet performance goals (spring rate).

C.12 Component Build

C.12.1 The contractor shall fabricate and install dampers, mounts, and other necessary hardware. The contractor shall perform needed vehicle modifications, and build and install control hardware.

C.13 Integration of Controller and Sensor Package

C.13.1 The contractor shall complete wiring of all necessary sensors and control computer throughout vehicle, including, but not limited to, the measurement of:

- a. Vehicle chassis acceleration and roll rate (from multiple vehicle locations).
- b. Suspension displacement and velocity.
- c. Steering, throttle, and brake inputs.
- d. Damper temperature

C.14 Shakedown and Tuning, and Post-Test Restoration

C.14.1 Once the MR suspension system has been fully integrated into the vehicle and tested for proper operation (debugging), the test vehicle will be transported by RMSV to a local testing area for shakedown testing and tuning of the system. Limited performance data may be recorded, but the primary purpose of the shakedown testing is to verify proper functionality of the system and to optimize (tune) the suspension system performance over random natural type terrain.

C.14.2. After contractor shakedown testing, the vehicle will be shipped by the Contractor to Yuma Proving Grounds for approximately 3 months of Government testing. The Contractor shall make available a minimum of 4 persons for six days (ten and one half hours per day) in support of Government testing. At the conclusion of testing, the vehicle will be returned to the contractor facility, and the contractor shall remove all hardware and controls developed and installed per this statement of work, to restore the vehicle to its as-delivered condition for return to the Government. (See clause H.16.4 hereof.)

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-01-C-L018 MOD/AMD P00005	Page 5 of 7
Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC		

*** END OF NARRATIVE C 003 ***

Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u> <u>MIPR</u>		OBLG STAT/ <u>JOB ORD NO</u>		<u>PRIOR AMOUNT</u>		INCREASE/DECREASE <u>AMOUNT</u>		CUMULATIVE <u>AMOUNT</u>
0001AG	E142C109EH	AE	2	\$	62,850.00	\$	49,845.00	\$	112,695.00
	63300544111		42C109						
					NET CHANGE	\$	49,845.00		

SERVICE <u>NAME</u>	NET CHANGE <u>BY ACRN</u>		<u>ACCOUNTING CLASSIFICATION</u>		ACCOUNTING <u>STATION</u>		INCREASE/DECREASE <u>AMOUNT</u>
Army	AE	21	42040000046N6N7EP633005255Y S20113		W56HZV	\$	49,845.00
					NET CHANGE	\$	49,845.00

		<u>PRIOR AMOUNT</u> <u>OF AWARD</u>		<u>INCREASE/DECREASE</u> <u>AMOUNT</u>		<u>CUMULATIVE</u> <u>OBLIG AMT</u>
NET CHANGE FOR AWARD:	\$	1,254,867.00	\$	49,845.00	\$	1,304,712.00

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN DAAE07-01-C-L018 MOD/AMD P00005	Page 7 of 7
Name of Offeror or Contractor: ROD MILLEN SPECIAL VEHICLES INC		

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.16 Government Furnished Equipment

H.16.1 The Government shall furnish one Stryker vehicle serial number LCV001 vehicle for testing and development activity, shipping on May 1, 2003. The vehicle shall undergo Government testing and development activities at Yuma Proving Ground (YPG) and Rod Millen Specialty Vehicles (RMSV), Inc. for a period of 16 months from the date of commencement. The vehicle shall be provided, along with such other data and parts, as shall be required for the test and development activities. The vehicle shall be accountable under this contract. It is accountable under contract DAAE07-00-D-M051, Delivery Order 0018, PM, BCT.

H.16.2. The Government shall provide the Stryker vehicle to the Contractor for installation of an MR damper semi-active suspension system and testing as expressed above. The Contractor shall be responsible for maintenance of such vehicle as expressed in paragraph H.16.4 below. The Contractor acknowledges that the Government makes no warranties of any kind with regard to the Stryker vehicle provided for testing, and that the Government shall not be liable for any incidental, special, or consequential damages attributable to the Contractor while the vehicle is in the Contractor's possession.

H.16.3. The Government shall be responsible for the transportation cost associated with shipping the vehicle to the RMSV facilities and Yuma Proving Grounds and shipment back to RMSV.

H.16.4. The Contractor shall be responsible for the maintenance and necessary servicing in order to keep the vehicle in good condition and operating order while the vehicle is in the Contractor's possession. The Contractor agrees to return the vehicle to the Government in as good a condition as when the vehicle was delivered to the contractor for use, except for ordinary wear and tear. This shall include, at the conclusion of the period of performance, removing all RMSV components and returning the vehicle suspension system and all parts to the original installed components.

H.16.5. The period of performance of the Phase II Plus portion of the Contract shall be from 30 Apr 2003 to 30 Aug 2004. .

*** END OF NARRATIVE H 003 ***